**CAPITAL IMPROVEMENTS PROGRAM FY 2005**

| | | | |
|---|---|---|---|
| **PROJECT TITLE:** | Second Street Force Main | **PROJECT NUMBER:** | 705 |
| **LOCATION:** | From 2nd Street Pumping Station to Bembe Beach Road in the vicinity of Awald Road | Prior Years' Spending/ Encumbrances as of 03/01/04 | $0 |
| **DEPARTMENT:** | Public Works | | |
| **DIVISION:** | Wastewater | | |

**DESCRIPTION:**

Replacement of the 65-year-old sewage force main running under Back Creek from the 2nd Street Pumping Station to its discharge point into the gravity sewer on Bembe Beach Road.

**JUSTIFICATION:**

Should failure occur, this replacement is critical in order to prevent a possible environmental incident in which 4,500,000 gallons of raw sewage could be discharged into the Chesapeake Bay each day if the old pipe line were to fail.

**STATUS:**

A design study has been completed, with the determination that there is no immediate need for replacement. Concept plans are complete and on file in the event of an emergency.

| **APPROPRIATION SCHEDULE** | PRIOR YEARS | CURRENT FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | FY 10 | TOTAL |
|---|---|---|---|---|---|---|---|---|
| Land $ | | | | | | | | 0 |
| Design | | | | | 60,000 | | | 60,000 |
| Construction | | | | | 875,000 | | | 875,000 |
| Inspection | | | | | 88,000 | | | 88,000 |
| Equipment | | | | | | | | 0 |
| Other | | | | | 190,000 | | | 190,000 |
| Total $ | 0 | 0 | 0 | 0 | 1,213,000 | 0 | 0 | 1,213,000 |

| **FUNDING SCHEDULE** | PRIOR YEARS | CURRENT FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | FY 10 | TOTAL |
|---|---|---|---|---|---|---|---|---|
| Bond Funds $ | | | | | 1,213,000 | | | 1,213,000 |
| Operating Funds | | | | | | | | 0 |
| Non City Funds | | | | | | | | 0 |
| Total $ | 0 | 0 | 0 | 0 | 1,213,000 | 0 | 0 | 1,213,000 |

**ESTIMATED FISCAL IMPACT ON OPERATING BUDGET:** Some savings in the annual electrical expenses for the 2nd Street Pumping Station will occur due to the reduced pumping head of the new pipe.

## CAPITAL IMPROVEMENTS PROGRAM FY 2005

| | | | |
|---|---|---|---|
| **PROJECT TITLE:** | Pump Station Replacements | **PROJECT NUMBER:** | 706 |
| **LOCATION:** | Whiten Court, Bywater Road, and Annapolis Roads Pumping Stations | Prior Years' Spending/ Encumbrances as of 03/01/04 | $0 |
| **DEPARTMENT:** | Public Works | | |
| **DIVISION:** | Wastewater | | |

**DESCRIPTION:**

Total replacement of existing sewage pumping stations with new concrete wet wells and submersible pumps, controlled by variable speed drives.

**JUSTIFICATION:**

All three stations are pre-fabricate "Tin Can" pumping stations that consist of an underground steel shell containing the pumps and controls to pump the wastewater collected from the neighborhood to the wastewater treatment plant on Edgewood Road. These stations are in excess of 30 years old and the steel containment vessel is at the end of it's design life.

**STATUS:**

Selection of design services is underway.

| APPROPRIATION SCHEDULE | PRIOR YEARS | CURRENT FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | FY 10 | TOTAL |
|---|---|---|---|---|---|---|---|---|
| Land $ | | | | | | | | 0 |
| Design | 35,000 | 35,000 | | 36,000 | | | | 106,000 |
| Construction | 350,000 | 350,000 | | 360,000 | | | | 1,060,000 |
| Inspection | 20,000 | 20,000 | | 20,000 | | | | 60,000 |
| Equipment | | | | | | | | 0 |
| Other | 42,000 | 42,000 | | 42,000 | | | | 126,000 |
| Total $ | 447,000 | 447,000 | 0 | 458,000 | 0 | 0 | 0 | 1,352,000 |

| FUNDING SCHEDULE | PRIOR YEARS | CURRENT FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | FY 10 | TOTAL |
|---|---|---|---|---|---|---|---|---|
| Bond Funds $ | | | | | | | | 0 |
| Operating Funds | 447,000 | 447,000 | | 458,000 | | | | 1,352,000 |
| Non City Funds | | | | | | | | 0 |
| Total $ | 447,000 | 447,000 | 0 | 458,000 | 0 | 0 | 0 | 1,352,000 |

**ESTIMATED FISCAL IMPACT ON OPERATING BUDGET:** Small reduction in operating and maintenance cost associated with more modern and efficient equipment.

## CAPITAL IMPROVEMENTS PROGRAM FY 2005

| | | | |
|---|---|---|---|
| **PROJECT TITLE:** | Sewer Rehabilitation | **PROJECT NUMBER:** | 998 |
| **LOCATION:** | City Wide | Prior Years' Spending/ Encumbrances as of 03/01/04 | $23,750 |
| **DEPARTMENT:** | Public Works | | |
| **DIVISION:** | Wastewater | | |

**DESCRIPTION:**

A major section of the City's sewer system was constructed in the 1930's and the larger pipe lines were constructed of concrete pipe. Over the past sixty-plus years, the concrete pipe has been deteriorated by the sewer gases and we recently had a 33" sewer line collapse. Due to location and development over and around these sewer lines, slip lining of the existing sewer is the most cost effective repair.

**JUSTIFICATION:**

TV inspection of approximately 9,000 feet of the suspect concrete pipe has shown varying degrees of pipe failure.

**STATUS:**

| **APPROPRIATION SCHEDULE** | PRIOR YEARS | CURRENT FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | FY 10 | TOTAL |
|---|---|---|---|---|---|---|---|---|
| Land $ | | | | | | | | 0 |
| Design | | | | 80,000 | 30,000 | | | 110,000 |
| Construction | | | | 3,550,000 | 876,930 | | | 4,426,930 |
| Inspection | | | | 50,000 | 50,000 | | | 100,000 |
| Equipment | | | | | | | | 0 |
| Other | | | | 225,000 | 78,070 | | | 303,070 |
| Total $ | 0 | 0 | 0 | 3,905,000 | 1,035,00 | 0 | 0 | 4,940,000 |

| **FUNDING SCHEDULE** | PRIOR YEARS | CURRENT FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | FY 10 | TOTAL |
|---|---|---|---|---|---|---|---|---|
| Bond Funds $ | | | | 3,905,000 | 1,035,00 | | | 4,940,000 |
| Operating Funds | | | | | | | | 0 |
| Non City Funds | | | | | | | | 0 |
| Total $ | 0 | 0 | 0 | 3,905,000 | 1,035,00 | 0 | 0 | 4,940,000 |

**ESTIMATED FISCAL IMPACT ON OPERATING BUDGET:** When completed, a reduction of inflow and infiltration should be noted and reflect in a reduction of flow at the WWTP.